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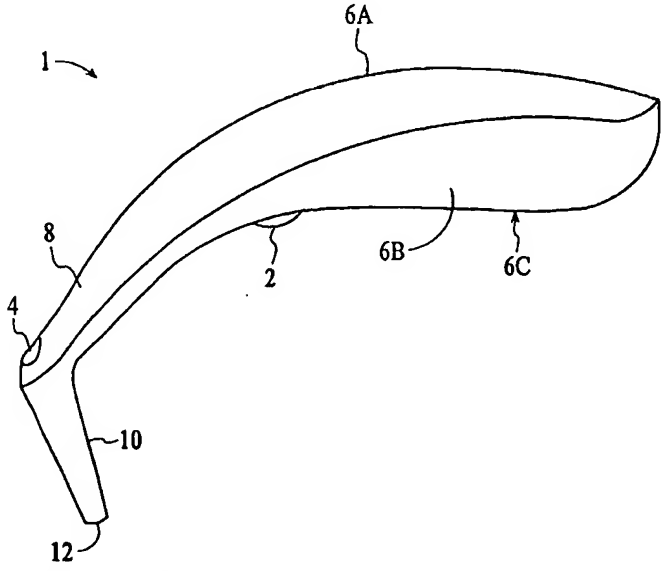

(57) Abstract: A miniaturized spectrometer/spectrophotometer system and methods are disclosed. A probe tip including one or more light sources and a plurality of light receivers is provided. A first spectrometer system receives light from a first set of the plurality of light receivers. A second spectrometer system receives light from a second set of the plurality of light receivers. A processor, wherein the processor receives data generated by the first spectrometer system and the second spectrometer system, wherein an optical measurement of a sample under test is produced based on the data generated by the first and second spectrometer systems.

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